Periscope.

Under the Direction of the Following Collaborators :

LOUIS ALLEN, M.D., Washington, D.C.
A. FREEMAN, M.D., New York.
S. E. JELLIFFE, M.D., New York.
WM. KRAUSS, M.D., Buffalo, N. Y.
I. LOWENKOPF, M.D., New York.
R. K. MACALESTER, M.D., New York.
P. MEIROWITZ, M.D., New York.
J. K. MITCHELL, M.D., Phila., Pa.
B. ONUF, M.D., Brooklyn.
W. B. PRITCHARD, M.D., New York.
H. PATRICK, M.D., Chicago, Ill.
T. S. CHRISTENSON, Chicago, Ill.
S. SHIVELY, M.D., New York.
A. STERNE, M.D., Indianapolis, Ind.

ANATOMICAL.

Ein Beitrag zur Lehre vom Bau der Ganglienzellen. Dr. H. Rosin, Assistentarzt, III. Med. Clinic. Berlin. (*Deutsche Med. Wochenschrift*, July 30, 1896, p. 495). In a concise and interesting paper, Rosin speaks of certain peculiarities of the ganglionic cells of the cord and brain. Ordinarily, the nuclei of all cells—other than ganglionic—are basophile, and the protoplasm, acidophile, *i. e.*, the former possess marked affinity for basic reagents, whereas the latter takes up only acid stains Rosin found the reverse true of ganglionic cells ; the nuclei are acidophile, or at least not basophile. A second characteristic of ganglionic cells of the cord, of the spinal ganglia, and of the cerebral cortex, he found to exist in their reaction with osmic acid. Whenever this reagent was used, there appeared collections of dark-brown granula in the body of the cell. In order to arrive at a definite conclusion as to the nature of these granule clumps, Rosin examined a series of cases, both normal and pathological, from old and middle-aged and youthful subjects. At the same time he controlled his researches by examinations of ganglionic cells of small and large animals.

It was found first that the same result was always obtained when osmic acid was used, and that these granula form a normal constituent of the ganglionic cells of the central nervous system, save those in the cerebellum, including the cells of Purkinje.

Artefacts he carefully sought to exclude.

Having established the presence of the granula as normally existing in the cell substance, Rosin determined their nature in the following manner.

Pieces of nerve tissue from the cord and brain were hardened in formal and then bleached in chlorine water. Some of these pieces were without further manipulation, imbedded and examined, whereas others were treated with osmic acid. It was found that the pigment normally present in the cells, had been entirely removed by the bleaching process, yet the dark-brown granula were shown in those specimens treated with osmic acid. Therefore, these granula bore no relationship to the normal cell-pigment, inasmuch as this had been previously removed.

Rosin then succeeded in extracting the fat from the cells, by means of alcohol and ether. Afterwards using very dilute osmic acid solutions of one-third to one-half per cent., he found that no dark-brown granula were shown in the sections. He concludes, therefore, that these granula are fatty by nature, as dilute osmic acid is a well-known reagent to detect the presence of fat. By the use of acetic acid, he proved that the granula were not albuminous.

Summing up, Rosin finds that the normal ganglionic cells of adults are filled with a granular substance, which is of a fatty nature, often pigmented light yellow. The pigmentation becomes more intense with advancing years, and is to a certain extent, independent of the fat tissue itself. This condition—"lipochromic"—manifested in nearly all ganglionic cells, is almost entirely absent in Purkinje's, and in the smallest cells is altogether absent. Infants show only traces of this condition, and in small animals it is lacking. This lipochromic process is also present in the adventitia of the blood vessels of the central nervous system, arteries, veins and capillaries, where it can be detected by the same methods. It is to be regretted that the microscopic specimens which served to illustrate Rosin's work, were not reproduced in the article reviewed. STERNE.

CLINICAL.

Two Cases of Tetanus following the repeated Injections of Morphia. By D. J. Leech, M.D. (*The Med. Chronicle*, Manchester, May, 1896). The first case was that of a medical man, 35 years of age, who died three days after the onset of the tetanic paroxysms. He had contracted the habit of injecting himself frequently with large quantities of morphia. There was reason to believe he had paid but little attention either to the cleanliness of the syringe, or to the clearness of the solution he used.

The second case was that of a man, who for several years had taken morphine for the relief of great abdominal pain and